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KILPATRICK STOCKTON LLP 607 14TH STREET, N.W. WASHINGTON, DC 20005			GOFF II, JOHN L	
			ART UNIT	PAPER NUMBER
			1733	
DATE MAILED: 04/07/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/087,930

Applicant(s)

SHARP, TERRANCE M.

Examiner

John L. Goff

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-31 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 5-31 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 05 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/11/05
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/21/05 has been entered. The previous 35 USC 112 rejections have been overcome.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

3. Claim 31 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 31 requires "side guides connecting with the projections". It is unclear where in the specification the nose of the tape applicator head is described as including side guides connected with projections. It appears from the specification (Page 5, lines 10-14 and Page 10, lines 11-14) the side guides are the projections, and this is the interpretation given by the Examiner.

Claim Rejections - 35 USC § 102

4. Claims 5, 8, 9, 15, 20, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Ermert et al. (Publication from *Plastics Engineering* titled "R U Reinforcing plastics with robots?").

Ermert et al. disclose a robotic tape applicator system capable of applying double-sided adhesive tape to a workpiece (See page 3, the heading "Tape-laying", lines 1-14 and 23-31). Ermert et al. teach the **robot system comprises a computer**, i.e. the claimed computer means (See page 2, the heading "Figure 1", line 1), **a robotic arm** under the control of the computer having **a tape applicator head attachment**, i.e. the claimed tape applicator means (See page 3, the heading "Figure 4", line 1 and the "Tape laying tool" within Figure 4), and **a liquid applicator attachment**, i.e. the claimed activator applicator means capable of applying an activator liquid along a predetermined path prior to application of the tape (See page 1, the heading "Fiber sprayup", lines 1-3 and the "Fiber spraying tool" within Figure 2 on page 2), and **a work table**, i.e. means to hold a work piece in registration with the tape applicator means (See page 2, the heading "Figure 1", line 1 and the "Parts mounting table" within Figure 1). Ermert et al. teach the robotic arm **tape applicator head attachment comprises a roller**, i.e. the claimed roller capable of releasably storing two-sided adhesive tape it being noted the roller disclosed by Ermert et al. is the same as the roller described by applicants specification (See page 4, the heading "Figure 5", lines 1-3 and the "Tape feed roll" within Figure 5), a roll of pre-impregnated tape having an adhesive on both sides, i.e. a roll of two-sided adhesive tape (See page 3, the heading "Tape-laying", lines 1-5 and 23-25 wherein a two-side adhesive tape is clearly disclosed), **a guide means**, i.e. the claimed guide means to guide the tape to a tape applicator

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head (See Figure 5 and the deflection rolls (not labeled) between the "Tape feed roll" and "Tension rolls"), a **tensioning means**, i.e. the claimed tensioning means located between the roller and tape applicator nose capable of maintaining a uniform tension (See the "Tension rolls" within Figure 5), a **pneumatically press driven tape applicator nose** having a smooth radius the center point of which lies along a roll axis of the robotic arm, i.e. the claimed tape applicator nose capable of permitting reciprocal motion in a direction normal to the workpiece and a pneumatic piston capable of applying pressure to the tape applicator nose (See page 3, the heading "Tape-laying", lines 28-30 and page 4, the heading "Figure 5", lines 1-3 and the "Pressure laydown roll" and "Roll-carrier movement" within Figure 5), and a **cutting means**, i.e. the claimed cutting means integral with the tape applicator head capable of cutting the tape under the control of the computer (See page 4, the heading "Figure 6", lines 1-4 and the "Cutting" within Figure 5). Ermert et al. teach the **computer may include a program** for operating the robotic arm and tape applicator head attachment (See page 4, the heading "Programming and tool changing", lines 1-11 and page 6, glossary definitions for Control, Servos, and Programming method), it being noted any program including data for the proposed path of the tape would intrinsically include data respecting the shape of the workpiece such that the limitations in claim 5 regarding the programmed data are met.

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Claim Rejections - 35 USC § 103

5. Claims 5, 8, 9, 15, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ermert et al. in view of Milacron (Publication of Cincinnati Milacron titled "Into The Future").

Ermert et al. is described in full detail above. As noted above, any program including data for the proposed path of the tape would intrinsically include data respecting the shape of the workpiece such that the limitations in claim 5 regarding the programmed data appear to be met. In any event, it would have been obvious to one of ordinary skill in the art at the time the invention was made to operate the computer taught by Ermert et al. using a well known and conventional tape applicator program such as that suggested by Milacron which includes data respecting the shape of the work piece and the proposed path of the tape as only the expected results would be achieved, i.e. the computer means would operate according to programmed data respecting the shape of the work piece and the proposed path of the tape to be adhered to the work piece.

Milacron disclose a tape applicator system including a computer and a tape applicator head wherein the computer controls the tape applicator head through a known and conventional program, the program including data respecting the shape of the work piece and the proposed path of the tape (Pages 4-6 and 21; see in particular the software representation on page 5 clearly showing the programmed data includes data respecting the shape of the workpiece and the proposed path of the tape).

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6. Claims 5 and 8-11, 15-18, 20, 21, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frank (U.S. Patent 4,382,836) in view of Ermert et al. and optionally Milacron or alternatively over Ermert et al. in view of Frank (U.S. Patent 4,382,836) and optionally Milacron.

Frank discloses a tape applicator head that may be carried by any stationary support structure (Column 5, lines 8-26). Frank teaches the **tape applicator head comprises a roller**, i.e. the claimed roller capable of releasably storing two-sided adhesive tape it being noted the roller disclosed by Frank is the same as the roller described by applicants specification (See Column 5, lines 31-35 and 20 of Figure 1), a **guide means**, i.e. the claimed guide means to guide the tape to a tape applicator head (See Column 5, lines 31-35 and 18 of Figure 1), a **nip roll tensioning means**, i.e. the claimed tensioning means located between the roller and tape applicator nose capable of maintaining a uniform tension (See Column 6, lines 16-19 and 64 and 66 of Figure 1), a **pneumatically press driven tape applicator nose** having a smooth radius the center point of which lies along a roll axis of the tape applicator, i.e. the claimed tape applicator nose capable of permitting reciprocal motion in a direction normal to the workpiece and a pneumatic piston capable of applying pressure to the tape applicator nose (See Column 5, lines 39-41 and 24 and 84 of Figure 1), a **tape breaking means** controlled by an actuator, i.e. the claimed tape braking means capable of holding the tape stationary during cutting (See Column 6, lines 30-38 and 74, 76, and 78 of Figures 1 and 2), and a **knife cutting means** that is fully retractable, controlled by an actuator, and located within the perimeter of the tape applicator, i.e. the claimed cutting means integral with the tape applicator head capable of cutting the tape (See Column 6, lines 58-68 and Column 7, lines 1-2 and Column 8, lines 48-68 and Column 9, lines

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1-2 and 98 and 100 of Figure 1). Frank is silent as to using the tape applicator head as part of a computer controlled robotic arm system. However, the tape applicator head taught by Frank is designed to be mounted on any movable support such that it would have been obvious to one of ordinary skill in the art at the time the invention was made to mount the tape applicator taught by Frank on any well known and conventional movable support for a tape applicator such as that shown for example by Ermert et al. (Ermert et al. is described in full detail above) wherein the system taught by Ermert et al. provides benefits such as automatic control of the tape applicator. Alternatively, Ermert et al. is not limited to any particular tape applicator (the tape applicator taught by Ermert et al. being part of a much larger system of interchangeable applicators) such that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use in the system taught by Ermert et al. the tape applicator taught by Frank for benefits such as the tape applicator would include tape braking means, a cutter located within the perimeter of the tape applicator, etc.

Regarding the computer, as noted above Ermert et al. teach the computer may include a program for operating the robotic arm and tape applicator head attachment, it being noted any program including data for the proposed path of the tape would intrinsically include data respecting the shape of the workpiece such that the limitations in claim 5 regarding the programmed data appears to be met. In any event, it would have been obvious to one of ordinary skill in the art at the time the invention was made to operate the computer taught by Frank as modified by Ermert et al. (or Ermert et al. as modified by Frank) using a well known and conventional tape applicator program such as that optionally suggested by Milacron which includes data respecting the shape of the work piece and the proposed path of the tape as only the

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expected results would be achieved, i.e. the computer means would operate according to programmed data respecting the shape of the work piece and the proposed path of the tape to be adhered to the work piece.

Regarding the particular type of tape used, it is noted applicant has claimed an apparatus wherein the material worked upon does not further limit (See MPEP 2115). In any event, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use as the adhesive tape in Frank as modified by Ermert et al. any conventional adhesive tape including two-sided adhesive tape as only the expected results would be achieved, it being noted Ermert et al. clearly disclose the use of two-sided adhesive tape.

Regarding the knife blade, Frank does not specifically disclose a sensor for detecting with then knife is retracted. However, it appears intrinsic to Frank as modified by Ermert al. (and Ermert et al. as modified by Frank) that the knife would include a sensor for detecting when the knife is retracted such that the apparatus is capable of operating and applying tape. In any event, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include in Frank as modified by Ermert al. (or Ermert et al. as modified by Frank) a knife blade sensor to ensure the knife is retracted and taping may occur.

7. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ermert et al., Frank, and optionally Milacron as applied in paragraph 6 above, and further in view of Roettger et al. (U.S. Patent 4,885,981).

Ermert et al., Frank, and optionally Milacron as applied above teach all of the limitations in claims 12 and 13 except for a specific teaching of the type of actuator used to operate the tape breaking means, it being noted Frank does not suggest or require any particular type of actuator.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to use any well known and conventional actuator to operate the tape breaking means taught by Ermert et al. as modified by Frank and optionally Milacron (or Frank as modified by Ermert et al. and optionally Milacron) such as a pneumatic spring return actuator as shown for example by Roettger et al. wherein the pneumatic spring actuator has advantages such as being designed to fail in either a closed or open position.

Roettger et al. disclose conventional pneumatic spring return actuators wherein the actuators have the particular benefit of being designed to fail in either a closed or open position (Figures 1 and 2 and Column 1, lines 6-29 and Column 2, lines 57-61).

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ermert et al. as applied in paragraph 4 above, or Ermert et al. and Milacron as applied in paragraph 5 above or Ermert et al., Frank, and optionally Milacron as applied in paragraph 6 above, and further in view of Heindel et al. (U.S. Patent 5,342,647).

Ermert et al., Frank, and optionally Milacron as applied above teach all of the limitations in claim 6 except for a specific teaching of the liquid applicator attachment including a back pressure relief system, it being noted a liquid storage tank would have been intrinsic to the system taught by Ermert et al. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in the liquid applicator attachment taught by Ermert et al. (or Ermert et al. as modified by Milacron or Ermert et al. as modified by Frank and optionally Milacron or Frank as modified by Ermert et al. and optionally Milacron) a back pressure relief system as was conventional in the art as shown for example by Heindel et al. to prevent the liquid applicator from clogging.

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Heindel et al. are exemplary of a conventional liquid applicator wherein the applicator includes a storage tank, an application gun, and a back pressure relief system to prevent the applicator from clogging (Column 9, lines 44-50 and Column 10, lines 11-13).

9. Claims 14 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ermert et al. as applied in paragraph 4 above, or Ermert et al. and Milacron as applied in paragraph 5 above or Ermert et al., Frank, and optionally Milacron as applied in paragraph 6 above, and further in view of Manusch et al. (U.S. Patent 5,462,633).

Ermert et al., Frank, and optionally Milacron as applied above teach all of the limitations in claims 14 and 31 except for a specific teaching of including on the nose of the tape applicator projections/side guides less than the thickness of the tape capable of contacting the tape. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include on the nose of the tape applicator taught by Ermert et al. (or Ermert et al. as modified by Milacron or Ermert et al. as modified by Frank and optionally Milacron or Frank as modified by Ermert et al. and optionally Milacron) projections/side guides having a thickness less than the thickness of the tape being applied as it was well known in the art to include projections on the nose of a tape applicator head to ensure the tape is applied up to a maximum pressure thus preventing tears or bumps in the applied tape as shown for example by Manusch et al.

Manusch et al. disclose a tape applicator head including on the nose of the applicator projections having a thickness less than the thickness of the tape being applied to ensure the tape is applied up to a maximum pressure thus preventing tears or bumps in the applied tape (Figure 2 and Column 1, lines 38-44 and 66-67 and Column 2, lines 1-17 and 28-37).

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10. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ermert et al. as applied in paragraph 4 above, or Ermert et al. and Milacron as applied in paragraph 5 above or Ermert et al., Frank, and optionally Milacron as applied in paragraph 6 above, and further in view of Jensen et al. (U.S. Patent 6,537,406).

Ermert et al., Frank, and optionally Milacron as applied above teach all of the limitations in claim 19 except for a specific teaching of including vacuum ports on the tape applicator. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include adjacent the nose of the tape applicator taught by Ermert et al. (or Ermert et al. as modified by Milacron or Ermert et al. as modified by Frank and optionally Milacron or Frank as modified by Ermert et al. and optionally Milacron) vacuum ports as it was well known in the art to include vacuum ports adjacent the nose of a tape applicator to ensure the tape is applied wrinkle free as shown for example by Jensen et al.

Jensen et al. disclose a tape applicator head including a nose having adjacent vacuum ports wherein the vacuum ports ensure the tape is applied wrinkle free (Figure 5 and Column 7, lines 40-49).

11. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ermert et al. as applied in paragraph 4 above, or Ermert et al. and Milacron as applied in paragraph 5 above or Ermert et al., Frank, and optionally Milacron as applied in paragraph 6 above, and further in view of Cairns (U.S. Patent 6,189,587).

Ermert et al., Frank, and optionally Milacron as applied above teach all of the limitations in claim 28 except for a specific teaching of including a sensor to detect when the tape roll is depleted. It would have been obvious to one of ordinary skill in the art at the time the invention

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was made to include in the tape applicator taught by Ermert et al. (or Ermert et al. as modified by Milacron or Ermert et al. as modified by Frank and optionally Milacron or Frank as modified by Ermert et al. and optionally Milacron) a tape depletion sensor as was well known and conventional in the art for detecting the amount of tape remaining on the roll as shown for example by Cairns.

Cairns is exemplary in the art of a tape applicator wherein the tape supply roll includes a sensor for detecting an amount of tape remaining of the roll (Column 2, lines 11-14 and 19-23).

12. Claims 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ermert et al. as applied in paragraph 4 above, or Ermert et al. and Milacron as applied in paragraph 5 above or Ermert et al., Frank, and optionally Milacron as applied in paragraph 6 above, and further in view of Grimshaw et al. (U.S. Patent 5,738,749).

Ermert et al., Frank, and optionally Milacron as applied above teach all of the limitations in claims 29 and 30 except for a specific teaching of including a linear bearing coupled to the tape applicator head. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include coupled to the tape applicator head taught by Ermert et al. (or Ermert et al. as modified by Milacron or Ermert et al. as modified by Frank and optionally Milacron or Frank as modified by Ermert et al. and optionally Milacron) a linear bearing to accommodate small changes in the surface contour of the workpiece as was known in the art as shown for example by Grimshaw et al.

Grimshaw et al. disclose a tape applicator head including a linear bearing to accommodate small changes in the surface contour of the workpiece (Column 5, lines 43-52).

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13. Claims 5, 8, 9, 15-18, and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murray et al. in view of Ermert et al. and optionally Milacron or alternatively over Ermert et al. in view of Murray et al. and optionally Milacron.

Murray et al. disclose a tape applicator head that may be computer controlled and carried by a stationary support structure. Murray et al. teach the **tape applicator head comprises a roller**, i.e. the claimed roller capable of releasably storing two-sided adhesive tape it being noted the roller disclosed by Murray et al. is the same as the roller described by applicants specification (See Page 6, lines 1-5 and 414 of Figure 4), a **guide means**, i.e. the claimed guide means to guide the tape to a tape applicator head (See Page 6, lines 46-50 and 467 of Figure 1), a **tensioning means**, i.e. the claimed tensioning means located between the roller and tape applicator nose capable of maintaining a uniform tension (See Page 9, lines 30-37 and 453 and 457 of Figure 4), a **pneumatically press driven non-rotary tape applicator nose** having a smooth radius the center point of which lies along a roll axis of the tape applicator, i.e. the claimed tape applicator nose capable of permitting reciprocal motion in a direction normal to the workpiece and a pneumatic piston capable of applying pressure to the tape applicator nose (See Page 5, lines 104-108 and Page 6, lines 75-79 and 447 and 448 of Figure 6 and 462 of Figure 4), and a **cutting means** that is fully retractable, controlled by an actuator, and located within the perimeter of the tape applicator, i.e. the claimed cutting means integral with the tape applicator head capable of cutting the tape (See Page 6, lines 96-106 and Page 7, lines 100-103 and 478 of Figure 7). Murray et al. are silent as to using the tape applicator head as part of a computer controlled robotic arm system. However, the tape applicator head taught by Murray et al. is designed to be computer controlled and mounted on any movable support such that it would have

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been obvious to one of ordinary skill in the art at the time the invention was made to mount the tape applicator taught by Murray et al. on any well known and conventional movable support for a tape applicator such as that shown for example by Ermert et al. (Ermert et al. is described above in full detail above) wherein the system taught by Ermert et al. provides benefits such as automatic control of the tape applicator. Alternatively, Ermert et al. is not limited to any particular tape applicator (the tape applicator taught by Ermert et al. being part of a much larger system of interchangeable applicators) such that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use in the system taught by Ermert et al. the tape applicator taught by Murray et al. for benefits such as the tape applicator would include a cutter located within the perimeter of the tape applicator, etc..

Regarding the computer, as noted above Ermert et al. teach the computer may include a program for operating the robotic arm and tape applicator head attachment, it being noted any program including data for the proposed path of the tape would intrinsically include data respecting the shape of the workpiece such that the limitations in claim 5 regarding the programmed data appears to be met. In any event, it would have been obvious to one of ordinary skill in the art at the time the invention was made to operate the computer taught by Murray et al. as modified by Ermert et al. (or Ermert et al. as modified by Murray et al.) using a well known and conventional tape applicator program such as that optionally suggested by Milacron which includes data respecting the shape of the work piece and the proposed path of the tape as only the expected results would be achieved, i.e. the computer means would operate according to programmed data respecting the shape of the work piece and the proposed path of the tape to be adhered to the work piece.

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Regarding the particular type of tape used, it is noted applicant has claimed an apparatus wherein the material worked upon does not further limit (See MPEP 2115). In any event, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use as the adhesive tape in Murray et al. as modified by Ermert et al. any conventional adhesive tape including two-sided adhesive tape as only the expected results would be achieved, it being noted Ermert et al. clearly disclose the use of two-sided adhesive tape.

14. Claims 19 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ermert et al., Murray et al., and optionally Milacron as applied above in paragraph 12, and further in view of Jensen et al.

Ermert et al., Murray et al., and optionally Milacron as applied above teach all of the limitations in claims 19 and 24 except for a specific teaching of including vacuum ports on the tape applicator. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include adjacent the nose of the tape applicator taught by Ermert et al. as modified by Murray et al. and optionally Milacron (or Murray et al. as modified by Ermert et al. and optionally Milacron) vacuum ports as it was well known in the art to include vacuum ports adjacent the nose of a tape applicator to ensure the tape is applied wrinkle free as shown for example by Jensen et al. Jensen et al. is described above in full detail.

Double Patenting

15. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686.

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F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

16. Claims 5, 8-10, 14, 20-23, 27, and 31 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, 4, and 5 of copending Application No. 10/991,853. Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations of claim 5 are met by claim 1 of 10/991,853 except for a specific teaching of a means to hold the workpiece. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include in the system taught by 10/991,853 a means to hold the workpiece such that the tape applicator head is accurately positioned as was conventional as shown for example by Ermert et al. (described in full detail above). Furthermore, the limitations of claim 8 are met by claim 1 of 10/991,853 except for a specific teaching of the tape applicator head including a roll of tape. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in the tape applicator head taught by 10/991,853 a roll for holding the tape as was conventional in the art as shown for example by Ermert et al.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Allowable Subject Matter

17. Claims 7, 25, and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

18. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to teach or suggest a robotic tape applicator including a computer having programmed data to control a robotic arm attached to a tape applicator head wherein the tape applicator head comprises a nose at the end of the tape applicator head used to contact the tape to a workpiece, the nose including a cutting mechanism integrated and stored within the nose when the cutting mechanism is not in operation.

Response to Arguments

19. Applicant's arguments with respect to claims 5-31 have been considered but are moot in view of the new ground(s) of rejection. Applicants arguments are addressed in the rejections above.

Conclusion

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is **(571) 272-1216**. The examiner can normally be reached on M-F (7:15 AM - 3:45 PM).

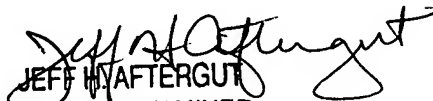
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John L. Goff



JEFF HYATT
PRIMARY EXAMINER
GROUP 1300